+357 96 030922
info@marketpublishers.com

Gene-Edited Crops Market Forecasts to 2034 – Global Analysis By Crop Type (Cereals & Grains, Fruits & Vegetables, Oilseeds, Pulses & Legumes and Other Crop Types), Trait Type, Technology, Application, End User and Geography

https://marketpublishers.com/r/G2D6E2F42F5CEN.html
Date: June 2026
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: G2D6E2F42F5CEN

Abstracts

According to Stratistics MRC, the Global Gene-Edited Crops Market is accounted for $6.8 billion in 2026 and is expected to reach $23.5 billion by 2034 growing at a CAGR of 16.8% during the forecast period. Gene-edited crops are plants whose genetic material has been precisely modified using advanced genome editing technologies such as CRISPR-Cas systems to improve traits without introducing foreign DNA. These crops are developed to enhance yield, disease resistance, drought tolerance, and nutritional content while reducing reliance on chemical inputs. Gene editing offers faster and more targeted improvements compared to traditional breeding methods. These crops are considered a key innovation for future food security and climate-resilient agriculture. Increasing regulatory acceptance and biotechnology advancements are driving research and commercialization of gene-edited crops worldwide.

Market Dynamics:

Driver:

Increasing food security pressure

Rising populations are creating demand for higher-yield and resilient crops. Gene-editing technologies allow precise modifications to improve productivity and nutritional value. Governments are supporting research initiatives to strengthen food supply chains. Agritech firms are investing in CRISPR and related tools to accelerate crop

+357 96 030922
info@marketpublishers.com

development. Awareness among farmers is growing as they recognize the benefits of gene-edited varieties.

Restraint:

Regulatory approval complexities

Different countries enforce varying standards, slowing global adoption. Lengthy approval processes discourage investment in new varieties. Smaller firms struggle to navigate complex compliance requirements. Public skepticism adds further challenges to regulatory acceptance. Governments are cautious about balancing innovation with safety concerns.

Opportunity:

CRISPR technology advancements

CRISPR enables precise, cost-effective, and rapid crop modifications. Farmers benefit from improved yields, pest resistance, and climate resilience. Manufacturers are developing CRISPR-based solutions tailored to diverse crops. Governments are funding projects to accelerate CRISPR adoption in agriculture. Partnerships between biotech firms and research institutions are expanding reach. This technological progress is fostering rapid growth in the gene-edited crops market.

Threat:

Intellectual property disputes

Competing patents create uncertainty for developers and farmers. Legal battles can delay commercialization of new crop varieties. Smaller firms struggle to afford licensing fees for proprietary technologies. Regional differences in IP enforcement complicate global expansion. Vendors face challenges in ensuring compliance across jurisdictions. These disputes are constraining consistent market growth.

Covid-19 Impact:

Covid-19 had a mixed impact on the gene-edited crops market. On one hand, demand rose as food security became a priority during the pandemic. Research institutions accelerated projects to develop resilient crops. Online platforms supported distribution

+357 96 030922
info@marketpublishers.com

of biotech knowledge and tools. On the other hand, supply chain disruptions delayed field trials and approvals. Economic uncertainty limited investments in biotech infrastructure. Overall, the pandemic acted as a catalyst, boosting awareness and long-term adoption.

The cereals & grains segment is expected to be the largest during the forecast period

The cereals & grains segment is expected to account for the largest market share during the forecast period as these staple crops are critical for global food security and benefit most from gene-editing innovations. Adoption is strong among commercial farms producing wheat, rice, and maize. Manufacturers are investing in durable and high-yield gene-edited varieties. Governments are supporting innovation through subsidies and pilot projects. Awareness campaigns highlight the importance of cereals in nutrition. Retail penetration of gene-edited cereals is expanding across global markets.

The biopharmaceutical applications segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the biopharmaceutical applications segment is predicted to witness the highest growth rate due to rising demand for gene-edited crops that serve as biofactories for therapeutic proteins and vaccines. Researchers are exploring crops as cost-effective platforms for drug production. Awareness campaigns emphasize the role of biotech agriculture in healthcare. Governments are funding initiatives to accelerate biopharmaceutical innovation. Partnerships between biotech firms and pharmaceutical companies are expanding reach. Startups are rapidly adopting gene-editing for medical applications.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share owing to advanced biotech infrastructure, strong investment capacity, and early adoption of gene-editing technologies. The US and Canada host leading innovators in agricultural biotechnology. Policy frameworks encourage sustainable and biotech-driven farming practices. Commercial enterprises are increasingly deploying premium gene-edited crops. Retail penetration of biotech solutions is widespread across the region. Academic institutions are actively researching CRISPR applications.

Region with highest CAGR:

+357 96 030922
info@marketpublishers.com

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR driven by supportive government subsidies for biotech farming initiatives. Countries such as China, India, and Japan are investing heavily in gene-editing research. Affordable solutions are gaining traction among mid-sized farms. Rural digitization programs are expanding access to biotech technologies. E-commerce platforms are helping distribute gene-edited seeds to remote areas. Younger demographics are increasingly drawn to sustainable biotech solutions.

Key players in the market

Some of the key players in Gene-Edited Crops Market include Bayer Crop Science, Corteva Agriscience, Syngenta AG, Pairwise Plants, Editas Medicine, Calyxt Inc., Inari Agriculture, CRISPR Therapeutics, Beam Therapeutics, Precigen Inc., Benson Hill Inc., Tropic Biosciences, KeyGene N.V., Yield10 Bioscience and Sangamo Therapeutics.

Key Developments:

In March 2026, Corteva Agriscience announced a comprehensive commercial biologicals update ahead of the Cereals 2026 exhibition at Diddly Squat Farm, highlighting the rapid market expansion of its BlueN™ and Utrisha® N biostimulants. This product rollout utilizes specialized nitrogen-fixing bacteria to colonize the plant's internal microbiome, enabling crops to capture atmospheric nitrogen continuously and boosting overall resource use efficiency by up to 40 percent.

In June 2025, Syngenta AG finalized the comprehensive integration of Novartis' Strains and Natural Products Collection, a massive repository of genetic strains and natural compounds engineered for agricultural microbiome optimization. This asset acquisition significantly accelerates Syngenta's biologicals pipeline, complementing the production capacity of its newly opened 22,000-square-meter biostimulant manufacturing facility in Orangeburg, South Carolina, which is purpose-built to deliver 16,000 tons of bio-based inputs annually.

Microbe Types Covered:

Bacteria-Based Products

Fungi-Based Products

Virus-Based Biocontrol Agents

+357 96 030922
info@marketpublishers.com

Protozoa & Others

Other Microbe Types

Applications Covered:

Soil Health Management

Crop Protection

Nutrient Enhancement

Yield Improvement

Other Applications

Formulations Covered:

Liquid Formulations

Solid / Powder Formulations

Granular Formulations

Seed Coatings

Other Formulations

Crop Types Covered:

Cereals & Grains

Fruits & Vegetables

Pulses & Oilseeds

+357 96 030922
info@marketpublishers.com

- Plantation Crops
- Other Crop Types

Distribution Channels Covered:

- Direct Sales
- Agri Input Retailers
- E-Commerce Platforms
- Cooperatives & Institutions
- Other Distribution Channels

Regions Covered:

- North America
  - United States
  - Canada
  - Mexico
- Europe
  - United Kingdom
  - Germany
  - France
  - Italy

+357 96 030922
info@marketpublishers.com

- Spain
- Netherlands
- Belgium
- Sweden
- Switzerland
- Poland
- Rest of Europe

Asia Pacific

- China
- Japan
- India
- South Korea
- Australia
- Indonesia
- Thailand
- Malaysia
- Singapore
- Vietnam
- Rest of Asia Pacific

South America

+357 96 030922
info@marketpublishers.com

- Brazil
- Argentina
- Colombia
- Chile
- Peru
- Rest of South America

Rest of the World (RoW)

- Middle East
  - Saudi Arabia
  - United Arab Emirates
  - Qatar
  - Israel
  - Rest of Middle East
- Africa
  - South Africa
  - Egypt
  - Morocco
  - Rest of Africa

What our report offers:

+357 96 030922
info@marketpublishers.com

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

10 GLOBAL GENE-EDITED CROPS MARKET, BY GEOGRAPHY

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Gene-Edited Crops Market Forecasts to 2034 – Global Analysis By Crop Type (Cereals & Grains, Fruits & Vegetables, Oilseeds, Pulses & Legumes and Other Crop Types), Trait Type, Technology, Application, End User and Geography

Product link: https://marketpublishers.com/r/G2D6E2F42F5CEN.html

Price: US$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G2D6E2F42F5CEN.html